

SUMIDA et al.

Serial No. Unknown

REMARKS

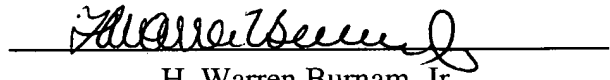
The above amendments are made to place the claims in a more traditional format.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "**Version With Markings To Show Changes Made.**"

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

3. (Amended) The lighting system as set forth in claim 1 [or 2], wherein said first outgoing direction is set so that light in said first outgoing direction should travel in said planar light guiding body in a perpendicular direction with respect to said cyclic direction.
4. (Amended) The lighting system as set forth in [any one of claims 1 through 3] claim 1, wherein light from said linear light guiding body reaches a peak value of luminance when outgoing in a second outgoing direction that is different from said first outgoing direction.
6. (Amended) The lighting system as set forth in [any one of claims 1 through 5] claim 1, wherein a ratio of maximum value and minimum value in luminance distribution of the light outgoing from said linear light guiding body in said first outgoing direction is not more than 3.
7. (Amended) The lighting system as set forth in claim 4 [or 5], wherein a ratio of maximum value and minimum value in luminance distribution of the light outgoing from said linear light guiding body in said second outgoing direction is not more than 3.
8. (Amended) The lighting system as set forth in [any one of claims 1 through 7] claim 1, wherein an angle that the cyclic direction of said cyclic structure provided on said planar light guiding body forms with respect to the repeating direction of said pixels is not less than 10° and not more than 80°.
9. (Amended) The lighting system as set forth in [any one of claims 1 through 8] claim 1, wherein in said linear light guiding body, on a surface thereof opposing said light outgoing surface, a propagating portion and a reflecting portion are repetitively formed.
10. (Amended) The lighting system as set forth in [any one of claims 1 through 9] claim 1, wherein a diffusing and reflecting sheet is provided to surround said linear light guiding body.

11. (Amended) The lighting system as set forth in [any one of claims 1 through 10] claim 1,
wherein:

said light source unit causes the light to enter said linear light guiding body,

the lighting system further comprising:

optical matching means provided between said light source unit and said linear light guiding body.

13. (Amended) The lighting system as set forth in [any one of claims 1 through 12] claim 1,
wherein said linear light guiding body is formed so that:

a thickness t2 of said light outgoing surface of said linear light guiding body is substantially
equal to a thickness t1 of a light incident surface of said planar light guiding body; and

an angle θ_5 formed between the normal direction of said light outgoing surface with a side end
surface of said linear light guiding body satisfies:

$$0^\circ < \theta_5 \leq 20^\circ$$

14. (Amended) The lighting system as set forth in [any one of claims 1 through 12] claim 1,
wherein said linear light guiding body is tapered so that a cross section of said linear light

guiding body taken along a plane perpendicular to said light outgoing surface thereof should be
in a shape of trapezoid that widens from a light outgoing surface side toward a side opposing the
light outgoing surface side.

16. (Amended) The lighting system as set forth in [any one of claims 1 through 15] claim 1,

wherein a reflecting surface is provided on said light incident surface of said linear light guiding
body in such a manner that light from said light source unit should be reflected toward said
cyclic structures formed on said linear light guiding body.

17. (Amended) The lighting system as set forth in [any one of claims 1 through 16] claim 1, wherein the following relationship is satisfied:

$$0 \text{ mm} < (L2-L1) \leq 10 \text{ mm}$$

where L1 representing a length of said light incident surface of said planar light guiding body, and L2 representing a length of said light outgoing surface of said linear light guiding body.

19. (Amended) The lighting system as set forth in [any one of claims 1 through 18] claim 1, wherein light outgoing from said linear light guiding body reaches substantially a peak value of luminance when outgoing in a direction at an angle θ_1 that satisfies:

$$\theta_1 = \sin^{-1}(n \times \sin \theta)$$

or

$$\theta_1 = -\sin^{-1}(n \times \sin \theta)$$

where:

θ represents an angle formed between the cyclic direction of said cyclic structure provided on said planar light guiding body and the repeating direction of said pixels; and

n represents a refractive index of said planar light guiding body.

20. (Amended) The lighting system as set forth in [any one of claims 1 through 18] claim 1, wherein the normal direction of said light outgoing surface of said linear light guiding body and said first outgoing direction form an angle expressed as:

$$\sin^{-1}(n \times \sin \theta)$$

where:

θ represents an angle formed between the cyclic direction of said cyclic structure provided on said planar light guiding body and said light incident surface of said planar light guiding body;

and

n represents a refractive index of said planar light guiding body.

27. (Amended) The lighting system as set forth in [any one of claims 22, 25, or 26] claim 22, wherein said at least one dot light emitting source constituting said light source unit is composed of an LED element.

30. (Amended) A liquid crystal display comprising:

a lighting system as set forth in [any one of claims 1 through 20, 22, and 24 through 29] claim 1; and

a liquid crystal display element displaying an image by controlling, at each pixel, light outgoing from said light outgoing surface of said planar light guiding body.

32. (Amended) A front light comprising a lighting system as set forth in [any one of claims 1 through 20, 22, and 24 through 29] claim 1.

33. (Amended) The liquid crystal display as set forth in claim 21 [or 30], wherein said liquid crystal display element is a reflecting liquid crystal display element.

37. (Amended) The lighting element as set forth in claim 35 [or 36], wherein values of said tilts are uniform throughout said I notches.

38. (Amended) The lighting element as set forth in [any one of claims 34 through 37] claim 34, wherein, on the surface of said linear light guiding body opposing said light outgoing surface, a total of widths of said notches in the lengthwise direction accounts for not less than 5 percent and not more than 80 percent of a sum of the total of said widths of said notches and a total of widths of flat portions provided between said notches.

39. (Amended) The lighting element as set forth in [any one of claims 34 through 38] claim 34, wherein, on the surface of said linear light guiding body opposing said light outgoing surface, a sum of a width of said notch in the lengthwise direction and a width of a flat portion in the

lengthwise direction is not less than 0.05 mm and not more than 2 mm, the flat portion being a portion provided between said notch and another adjacent notch on one side to said notch.

40. (Amended) The lighting element as set forth in [any one of claims 34 through 39] claim 34, wherein:

said linear light guiding body has a second light incident surface on an end surface opposing said light incident surface of said linear light guiding body;

notches that reflect the incident light are arrayed in the lengthwise direction on a surface of said linear light guiding body opposing said light outgoing surface, the number of said notches being J (J is an integer of not less than 2); and

an average of tilts of said J notches is greater than 0, said tilt being defined as:

$$\text{TILT} = (d_{j+1} - d_j) / (x_{j+1} - x_j)$$

where x_i and d_i are a distance from said light incident surface, and a depth, respectively, of the j'th notch from said second light incident surface (j is an integer ranging from 1 to I).

42. (Amended) The lighting element as set forth in [any one of claims 34 through 41] claim 34, wherein:

each of said notches is a V-shape groove formed with two flat surfaces; and

an angle that each flat surface forms with respect to said light outgoing surface is not less than 30° and not more than 60°.

43. (Amended) The lighting element as set forth in [any one of claims 34 through 42] claim 34, wherein diffusing means is provided in the vicinity of said linear light guiding body.